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10/574,132

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Wilhelmus Christianus Maria Lohbeck

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SHELL OIL COMPANY

P O BOX 2463

HOUSTON, TX 772522463

EXAMINER

GAY, JENNIFER HAWKINS

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/574,132	<b>Applicant(s)</b> LOHBECK, WILHELMUS CHRISTIANUS MARIA	
	<b>Examiner</b> JENNIFER H. GAY	<b>Art Unit</b> 3676	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 15, 2010 has been entered.

### *Response to Arguments*

2. Applicant's arguments with respect to claims 1-10 and 12-14 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-3 and 5-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey et al. (US 6,098,717, referred to hereafter as Bailey).**

**Regarding claim 1:** Bailey discloses an assembly for use in a wellbore formed in an earth formation, comprising:

an expandable tubular element **14** and an outer structure **16** having first and second portions arranged at a distance from each other **Fig 1**, wherein the expandable tubular element shortens as a result of radial expansion thereof **this feature is not**

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**disclosed however metal tubulars inherently shorten to some degree when radially expanded;**

the first portion and the second portion of the outer structure being connected to the tubular element at respective locations axially spaced from each other such that the distance between the first and second portions changes during of radial expansion of the tubular element between the first and second portions; and

the outer structure further having a third portion arranged to move radially outward upon the change in distance between the first and second portions;

wherein the radially outward movement of the third portion is larger than the radially outward movement of the tubular element that results from radial expansion of the tubular element.

**Bailey does not specifically disclose that the first and second portions move toward each other when the tubular element is expanded or that the outer structure includes a third portion that is radially expanded outward more than the tubular element, however, as seen in Figure 2, the outer structure clearly includes overlaying slits. As defined by Applicant, a tubular element that includes a plurality of overlaying or overlapping slits will experience significantly less axial shortening compared to expandable tubulars that do not include slits *page 3, lines 11-14*. Therefore, since the outer structure of Bailey includes a plurality of overlapping slits and is securely held at the first and second ends to the inner tubular element, the inherent characteristic of the outer structure to experience less axial shortening than the inherent shortening of the inner tubular member will result in the first and second portions being moved closer to each other and some portion there between being moved radially outward.**

**Regarding claim 2:** Wherein the third portion is arranged to move radially outward as a result of a decrease in distance between the first portion and the second portions **see above**.

**Regarding claim 3:** Wherein the third portion is arranged to move radially outward by virtue of radially outward bending of the third portion **see above**.

**Regarding claim 5:** Wherein the tubular element is an inner tubular element and the outer structure is an outer expandable tubular element arranged around the inner tubular element, and wherein the outer tubular element, when unrestrained from the inner tubular element, is susceptible to less axial shortening as a result of radial expansion than the inner tubular element **see above**.

**Regarding claim 6:** The outer tubular element is provided with a plurality of openings **26** in the wall thereof, said openings overlapping each other in the axial direction **Fig 2 - the term “axial” does not provide an patentable distinction with an indicated direction or orientation as an axis can be taken from any point and in any direction**.

**Regarding claim 7:** The openings are slots provided in the wall of the outer expandable tubular element, the slots extending in substantially in the axial direction **the term “axial” does not provide an patentable distinction with an indicated direction or orientation as an axis can be taken from any point and in any direction**.

**Regarding claim 8:** The first portion and the second portion are respective end portions of the outer tubular element.

5. **Claims 1-3 and 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al. (US 7,048,048, referred to hereafter as Nguyen).**

**Regarding claim 1:** Nguyen discloses an assembly for use in a wellbore formed in an earth formation, comprising:

an expandable tubular element **62** and an outer structure **50** having first and second portions arranged at a distance from each other **Fig 2**, wherein the expandable

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tubular element shortens as a result of radial expansion thereof **this feature is not disclosed however metal tubulars inherently shorten to some degree when radially expanded;**

the first portion and the second portion of the outer structure being connected to the tubular element at respective locations axially spaced from each other such that the distance between the first and second portions changes during of radial expansion of the tubular element between the first and second portions; and

the outer structure further having a third portion arranged to move radially outward upon the change in distance between the first and second portions;

wherein the radially outward movement of the third portion is larger than the radially outward movement of the tubular element that results from radial expansion of the tubular element.

**Nguyen does not specifically disclose that the first and second portions move toward each other when the tubular element is expanded or that the outer structure includes a third portion that is radially expanded outward more than the tubular element, however, as seen in Figure 2, the outer structure clearly includes overlaying slits. As defined by Applicant, a tubular element that includes a plurality of overlaying or overlapping slits will experience significantly less axial shortening compared to expandable tubulars that do not include slits *page 3, lines 11-14*. Therefore, since the outer structure of Nguyen includes a plurality of overlapping slits and is securely held at the first and second ends to the inner tubular element, the inherent characteristic of the outer structure to experience less axial shortening than the inherent shortening of the inner tubular member will result in the first and second portions being moved closer to each other and some portion there between being moved radially outward.**

**Regarding claim 2:** Wherein the third portion is arranged to move radially outward as a result of a decrease in distance between the first portion and the second portions **see above.**

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**Regarding claim 3:** Wherein the third portion is arranged to move radially outward by virtue of radially outward bending of the third portion **see above**.

**Regarding claim 5:** Wherein the tubular element is an inner tubular element and the outer structure is an outer expandable tubular element arranged around the inner tubular element, and wherein the outer tubular element, when unrestrained from the inner tubular element, is susceptible to less axial shortening as a result of radial expansion than the inner tubular element **see above**.

**Regarding claim 6:** The outer tubular element is provided with a plurality of openings in the wall thereof, said openings overlapping each other in the axial direction **Fig 2 - the term “axial” does not provide an patentable distinction with an indicated direction or orientation as an axis can be taken from any point and in any direction.**

**Regarding claim 7:** The openings are slots provided in the wall of the outer expandable tubular element, the slots extending in substantially in the axial direction **the term “axial” does not provide an patentable distinction with an indicated direction or orientation as an axis can be taken from any point and in any direction.**

**Regarding claim 8:** The first portion and the second portion are respective end portions of the outer tubular element.

6. **Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Brezinski et al. (US 2005/0092485, referred to hereafter as Brez).**

**Regarding claim 1:** Brez discloses an assembly for use in a wellbore formed in an earth formation, comprising:

an expandable tubular element **62** and an outer structure **56** having first **58** and second **60** portions arranged at a distance from each other **Fig 3**, wherein the expandable tubular element shortens as a result of radial expansion thereof **this feature is not**

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**disclosed however metal tubulars inherently shorten to some degree when radially expanded;**

the first portion and the second portion of the outer structure being connected to the tubular element at respective locations axially spaced from each other such that the distance between the first and second portions changes during of radial expansion of the tubular element between the first and second portions **Fig 4**; and

the outer structure further having a third portion **shown in Figure 4** arranged to move radially outward upon the change in distance between the first and second portions;

wherein the radially outward movement of the third portion is larger than the radially outward movement of the tubular element that results from radial expansion of the tubular element **Fig 4**.

**Regarding claim 2:** Wherein the third portion is arranged to move radially outward as a result of a decrease in distance between the first portion and the second portions **Fig 4**.

**Regarding claim 3:** Wherein the third portion is arranged to move radially outward by virtue of radially outward bending of the third portion **Fig 4**.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey or Nguyen.**

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Neither Bailey nor Nguyen discloses that the first and second portions of the outer structure are welded to the tubular element. However, the respective outer structures are clearly securely fastened to the inner tubular element though the means of attachment is not disclosed. The Examiner takes **OFFICIAL NOTICE** that it is old and well known in the art to use welding to secure various components of downhole structures together. The use of welds allows for a secure connection that can also be removed if or when repairs are necessary. Further, the use of welds to secure the outer structure to the inner tubular element of either Bailey or Nguyen would have achieved the predictable result of preventing sand and other debris from getting between the two structures and causing unnecessary wear.

**9. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey or Nguyen in view of Metcalfe (US 6,457,533).**

Neither Bailey nor Nguyen discloses filling an annular space between the inner and outer tubular elements with a hardenable fluidic compound.

Metcalfe discloses a downhole expandable tubular that includes an inner tubular element **28** and an outer tubular element **24** with a sealing material **26** disposed therebetween. Metcalfe further discloses the use of such systems with cementing operations and depicts element 26 as a cementitious material per 37 CFR 1.84(h)(3). Cement is a known hardenable fluidic compound.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the systems of Bailey or Nguyen to place a hardenable fluidic compound between the inner and outer tubular elements as taught by Metcalfe in order to have from an effective zonal isolation system that would have provided support to the bore wall as well as provided control of the flow of oil from the wellbore formation **1”20-35**.

**10. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey or Nguyen in view of Kirk et al. (US 7,096,939, referred to hereafter as Kirk).**

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Neither Bailey nor Nguyen discloses the outer structure including a plurality of axially extending elongated, metal members spaced around the circumference of the structure.

Kirk discloses a downhole expandable tubular system that includes an inner tubular element **12** and an outer tubular structure **24**. The outer tubular structure includes a plurality of circumferentially spaced elongated bars **25**, **Fig 2A, B**.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the outer structure of Bailey or Nguyen to include a plurality of circumferentially spaced metal bars as taught by Kirk in order to have not only provided a downhole centralizer but also to have provided a centralizer even after the tubular system was expanded **4:10-15**.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER H. GAY whose telephone number is (571)272-7029. The examiner can normally be reached on Monday through Friday, 7am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shane Bomar can be reached on (571) 272-7026. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer H Gay/  
Primary Examiner, Art Unit 3676

JHG, 9/27/10